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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/752,938	01/06/2004	Jeffrey Gabbay	082871-000600US	5796

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EXAMINER

SOROUGH, ALI

ART UNIT	PAPER NUMBER
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1616

MAIL DATE	DELIVERY MODE
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05/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/752,938

Applicant(s)

GABBAY, JEFFREY

Examiner

Ali Soroush

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgement of Receipt

Applicant's response filed on 12/05/2006 to Office Action mailed on 06/06/2006 is acknowledged.

Status of Claims

Claims 4-19 have been cancelled and claims 1 and 2 have been amended. Therefore, claims 1-3 are pending examination for patentability.

Applicant's Arguments

1. Rejection of claim 1-3 under 35 U.S.C. 112, second paragraph is withdrawn in light of the amendment submitted with the aforementioned response.

2. Applicant argues that rejection of claim 1 under the doctrine of double of obviousness-type double patenting in view of copending application 10/890936 should be withdrawn because the copending application was filed after the instant application. Applicant's argument is not found to be persuasive and the rejection is maintained. The rejection is maintained for the reasons set forth in Office Action mailed on 06/06/2006. Applicant has not at the time of this Office Action amended the claims of the co-pending application (10/890936) so that it does not overlap in scope with the claims of the instant application. Upon amendment of the claims of the copending application, the examiner will reconsider the rejection.

3. Rejection of claims 1-3 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5180585 is withdrawn in light of the amendment submitted with the aforementioned response.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gabbay (International Application Published Under the PCT, WO 01/74166 A1, Published 10/11/2001).

Gabbay teaches, "A process for preparing an antimicrobial and antiviral polymeric material, comprising preparing a polymeric slurry, introducing an ionic copper powder and dispersing the same in said slurry and then extruding said slurry to form a polymeric material wherein particles of said ionic copper are encapsulated therein and protrude from surfaces thereof." (See page 11, claim 9). Gabbay further teaches that the ionic copper powder to be added to the slurry is a mixture of CuO and Cu₂O. (See page 7, Lines 21-22). The polymeric materials that can be used in this invention include acrylic, silastic rubber, and latex. (See page 4, Lines 28-30). For the foregoing reasons the instantly claimed method of imparting antiviral properties to a hydrophilic polymeric material is anticipated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gabbay (International Application Published Under the PCT, WO 01/74166 A1, Published 10/11/2001) in view of applicants admission on page 12 lines 4-5 or in view of Yoshikazu et al. (Japanese patent application 05-005108, Published 01/14/1993).

Applicant Claims

Applicant claims a method of imparting antiviral properties to a hydrophilic polymeric material comprising preparing hydrophilic polymeric slurry and dispersing an ionic copper powder in the slurry. Wherein the ionic copper powder is prepared by oxidation-reduction.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Gabbay have been disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)

Gabbay does not specify how the ionic copper powder is made. This deficiency is cured by the applicant's own admission. This deficiency is also cured by the teachings of Yoshikazu et al.

Applicant states in the specification, "An amount of copper oxide was produced through a reduction oxidation process **as known per se and as described in the aforementioned prior art.**" (See page 12, Lines 4-5).

Yoshikazu et al. teaches, "Cu powder formed by reducing a Cu-containing material is stored in a solvent and flaked." (See abstract). Yoshikazu et al. further teaches that the starting raw material consist of Cu(NO₂) and CuSO₄. (See paragraph 0004).

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

Although Gabbay does not specify how the powder is made one would have been motivated to produce such as powder by an oxidation-reduction process. One would have been motivated to do this because applicant's admission states that the method of making an ionic copper powder is known in the prior art to have been made by an oxidation-reduction process. See MPEP 2129: "Where the specification identifies work done by another as 'prior art,' the subject matter so identified is treated as admitted prior art. In re Nomiya, 509 F.2d 566, 571, 184 USPQ 607, 611 (CCPA 1975)

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(holding applicant's labeling of two figures in the application drawings as 'prior art' to be an admission that what was pictured was prior art relative to applicant's improvement)."

One also would have been motivated to produce a ionic copper powder by reduction because Yoshikazu et al. teach that such a powder can be produced through a reduction process starting with $\text{Cu}(\text{NO}_2)$ and CuSO_4 . Therefore, if one of ordinary skill in the art at the time of the invention were to produce polymeric slurry consisting of ionic copper powder it would have been obvious to produce such a powder by oxidation-reduction as known in the art. For the foregoing reasons the instantly claimed method of imparting antiviral properties to a hydrophilic polymeric material would have been obvious to one of ordinary skill in the art at the time of the invention.

2. Claim 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gabbay (International Application Published Under the PCT, WO 01/74166 A1, Published 10/11/2001) in view of Asano et al. (U.S. Patent 4345101, Published 08/17/1982).

Applicant Claims

Applicant claims a method of imparting antiviral properties to a hydrophilic polymeric material comprising preparing hydrophilic polymeric slurry and dispersing an ionic copper powder in the slurry. Wherein the ionic copper powder is prepared by oxidation-reduction using formaldehyde.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Gabbay have been disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims
(MPEP §2141.012)

Gabbay does not specify how the ionic copper powder is made. This deficiency is cured by the teachings of Asano et al.

Asano et al. teaches that a reduced copper is produced by "a method which comprises reducing a salt or hydroxide of copper in aqueous solution with formaldehyde, hydrazine or sodium hydride". (See column 3, Lines 60-64).

Finding of Prima Facie Obviousness Rational and Motivation
(MPEP §2142-2143)

Although Gabbay does not specify how the powder is made one would have been motivated to produce such as powder by an oxidation-reduction process. One would have been motivated to produce a ionic copper powder by reduction because Asano et al. teach that copper can be reduced can be produced through a reduction process starting with copper salt or hydroxide and using formaldehyde. Although Asano et al does not specify that such a method would result in a powder it is implicit. Similar reactions would result in a similar product. Therefore, if one of ordinary skill in the art at the time of the invention were to produce polymeric slurry consisting of ionic copper powder it would have been obvious to produce such a powder by oxidation-reduction as known in the art. For the foregoing reasons the instantly claimed method of imparting antiviral properties to a hydrophilic polymeric material would have been obvious to one of ordinary skill in the art at the time of the invention.

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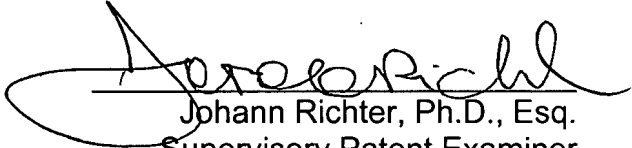
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush
Patent Examiner
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